

**BY ORDER OF THE COMMANDER
AIR EDUCATION AND TRAINING
COMMAND**

AETC INSTRUCTION 11-401

25 AUGUST 1994

Flying Operations



**AIRCREW TRAINING DEVICE (ATD)
SCHEDULING AND
UTILIZATION REPORTING**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction establishes procedures for AETC ATD scheduling and utilization reporting requirements at undergraduate flying training (UFT) bases. It implements AFPD 11-4, *Aviation Service*. It applies to ATDs used to support UFT training programs. Contractors will comply with this instruction; however, the contract takes precedence. The applicable contract officer resolves conflicts. **Attachment 1** lists references, abbreviations, and terms used in this instruction.

1. ATD Scheduling:

1.1. Each base determines the daily training program period start and stop times, but the total elapsed time cannot exceed the contract established hours. Any requested training time that exceeds the daily contract established hours must have the approval of the contract administrative contracting officer before the training begins. This training time is treated as additional effort according to the applicable contract. If changes occur to the daily utilization plan, the government provides the changes to the contractor in sufficient time to permit orderly preparations for the rescheduling of maintenance requirements, console operations, and simulator instructors. When scheduling training missions outside the published daily utilization plan, but within the contract established hours, the contractor must be notified a minimum of 2 hours before the start of the added mission.

1.2. ATD mission lengths are as follows:

1.2.1. **T50/T51 Instrument Flight Simulator (IFS) (T-37/T-38 Simulators).** Each mission is 1.5 hours long (flight time plus turnaround time, 1.3 plus 0.2). Turn time (a maximum of 15 minutes) is used for egress, ingress, strap in, unscheduled maintenance, etc., with maintenance having priority.

1.2.2. **T45 Undergraduate Navigator Training Simulator (UNTS) (Randolph AFB Only).** Each mission is 4 hours long (occasionally there are 8-hour missions) with 1 hour separating each 4-hour mission.

1.2.3. **T94/T95 Trainer, Flight Simulator (TFS) (Sheppard AFB Only).** Each mission is 1.5 hours long (flight time plus turn time, 1 hour and 20 minutes plus 10 minutes). Turn time is used for egress, ingress, strap in, unscheduled maintenance, etc., with maintenance having priority.

1.2.4. **T96 Trainer, Flight Simulator (TFS) (T-1A Simulator).** T96 mission lengths vary. Schedule sorties in half-hour increments including 10 minutes turn time for ATD initialization or minor adjustments to the ATD by the contractor (for example, for 2.6 hours syllabus time plus 0.2 turn time, schedule 3.0 hour block).

1.3. If equipment downtime, such as modifications and inspections, will affect ATD scheduling, the ATD work center (contractor site manager or alternate) completes AF Form 2401, **Equipment Utilization and Maintenance Schedule**, and submits it monthly, through the project officer (PO), to the operations group or flying training squadron programmers.

1.4. For weekly scheduling, operations group consolidates flying training squadron requests for ATD support on AETC Form 777, **ATD Weekly Utilization Plan**, as shown in [Attachment 2](#). Scheduling by hours or sorties is local option. Operations group ensures copies of the ATD Weekly Utilization Plan are delivered to the ATD PO, quality assurance representative (QAR), or quality assurance evaluator (QAE), and the ATD contractor by 1200 on Wednesday preceding the week being scheduled.

1.5. Daily scheduling is as follows:

1.5.1. The ATD maintenance work center provides, to the operations group or flying training squadron programmer, the ATD status by 1200 each day. Operations group and flying training squadrons establish the ATD schedule.

1.5.2. Operations group or flying training squadron programmer prepares AETC Form 513, **ATD Daily Utilization Plan**, as shown at [Attachment 3](#), (or computer-generated form) using the status and tail numbers (T45 simulator may use weekly schedule). Identify sorties by type mission (training or orientation if known) or flight assignment, start time, and completion time. Programmers should consider mission length (see paragraph [1.2.](#)) when selecting aircrew training stations (ATS) by tail number for subsequent scheduled flights. Equal use of all ATDs should be considered. The schedule is prepared for the entire day.

1.5.3. A copy of the completed schedule is distributed to the ATD maintenance work center and the ATD operations work center by 1500 the day before the schedule day or by 2100 the day before if student night flying is being performed. Operations group or flying training squadron programmers will schedule adds by tail number.

1.5.4. Automated scheduling that complies with the intent of ATD Daily Utilization Plan can be used instead of the ATD Daily Utilization Plan at [Attachment 3](#). The ATD Daily Utilization Plan may show the entire days schedule or half-day periods on separate forms as determined by the wing.

1.5.5. The ATD contractor must coordinate with the operations group or flying training squadron programmers and PO, QAR, and QAE before committing an ATS to maintenance. At least a 1-hour notice is required if ATSs committed to maintenance are to be scheduled for operational use.

2. Maintenance Reporting and Responsibilities Pertaining to ATDs:

2.1. ATD Work Center:

2.1.1. Use the AETC Form 513 as the dispatch log. If applicable, log each sortie, to include type mission (training or orientation), student or trainee, and instructor name. Additional requirements may be established by each wing. Provide original completed ATD Daily Utilization Plan to the PO by 1200 the next duty day.

2.1.2. Review and coordinate completed AETC Form 513 with operations group or flying training squadron programmers for accuracy. Use the completed AETC Form 513 to compile data for AETC Form 776, **Aircrew Training Device Monthly Summary**. (See [Attachment 4](#) and [Attachment 5](#).)

2.1.3. Complete AETC Form 776 according to [Attachment 4](#) and [Attachment 5](#). Send one copy to the wing PO and 1 copy to the 619 TRSS/IDS, 1150 5th Street East Ste 2, Randolph AFB TX 78150-4404.

2.2. Operations Group, Flying Training Squadrons, and Operations Support Squadron:

2.2.1. Aircrew personnel document equipment malfunctions on the appropriate forms and inform ATD contractor personnel of the malfunction.

2.2.2. Use AFTO Form 781, **AFORMs Aircraft/Mission Flight Data Document**, to document training according to AFI 11-401, **Flight Management** (formerly AFR 60-1).

2.2.3. The simulator quality assurance office retains the completed AETC Form 513 or automated schedule on file for at least 1 year.

2.3. Operations Group Commander:

2.3.1. Signs the ATD Weekly Utilization Plan.

2.3.2. Conducts meetings as needed with selected personnel to analyze the effectiveness of daily schedules and ATD utilization.

3. Forms Prescribed. AETC Forms 513, 776, and 777.

GLENN A. PROFITT II, Maj Gen, USAF
Director of Plans and Operations

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFPD 11-4, *Aviation Service*

AFI 11-401, *Flight Management*

Abbreviations and Acronyms

ATD—aircrew training device

ATS—aircrew training station

CAP—capability

CFT—cockpit familiarization trainer

CPT—cockpit procedures trainer

CSI—contract simulator instructor

FMT—flight deck mockup trainer

IFS—instrument flight simulator

Maint—maintenance

MDS—mission design series

OFT—operational flight trainer

OPS—operations

Ops Adds—operations added

Ops Can—operations cancel

PO—project officer

P-O—power on

PIT—part task trainer

QAE—quality assurance evaluator

QAR—quality assurance representative

TFS—trainer, flight simulator

UFT—undergraduate flying training

UNTS—undergraduate navigator training simulator

WST—weapon system trainer

Terms

Aircrew Training Device (ATD)—Training device used to prepare aircrew members for the actual performance of flight duties; for example, cockpit familiarization trainer (CFT), cockpit procedures trainer (CPT), flightdeck mockup trainer (FMT), operational flight trainer (OFT), flight simulator trainers, part task trainer (PTT), instrument flight simulator (IFS), and weapon system trainer (WST).

Aircrew Training Station (ATS)—A cockpit or student station on an ATD. Some ATDs, such as T50/T51 IFS or T45 UNTS, may have more than one ATS; for example, cockpits, booths, and student stations.

ATD Daily Training Program Period—ATD schedule as printed on the Daily Utilization Plan.

Capability—Number of ATSs or ATDs scheduled to meet the daily sortie schedule. Not to be confused with the number of sorties on the daily schedule.

Deviation—Any change to the published schedule that occurs after 30 minutes before the start of the first scheduled sortie. The following events are deviations:

- Cockpit and (or) tail number change to the printed schedule.
- An operations, maintenance, weather, or other add.
- A ground abort, maintenance cancellation, other cancellation, or weather cancellation.

Maintenance/Contractor Cancel—Missions canceled due to maintenance problems or lack of contractor support.

No Shows—Crew fails to show or shows with insufficient time to complete the mission. Crew and (or) students have a 15-minute "grace time" after the mission start time to sign in; if not, the mission is considered a no show. If a crew and (or) student signs in after the 15-minute deadline, the crew and (or) student can only take credit for the time the simulator is actually used. The unused time is considered no show time. The crew and (or) student may use the maintenance allocated turn time to successfully complete a mission and maintenance does not require the time. In all instances, the crew and (or) student cannot extend the mission past the start of the next training period.

Operations Adds (Ops Adds)—Sorties added to the published schedule by operations. (See deviation.)

Operations Cancel (Ops Can)—Sorties canceled and (or) deleted from the published schedule by operations. (See deviation.)

Attachment 2

SAMPLE AETC FORM 777

ATD WEEKLY UTILIZATION PLAN						TYPE ATD A/F37A-T50		
UNIT/LOCATION 47FTW, LAUGHLIN AFB TX						WEEK OF 23 May 94 to 27 May 94		
	MON	TUE	WED	THU	FRI	SAT	SUN	TOTAL
TOTAL SORTIES/ HOURS REQUIRED	18.0	13.0	13.0	13.0	13.0			70.0
Student Syllabus (T-1)	16.0	0.0	13.0	25.0	16.0			70.0
Upgrade (T-3)			2.0	3.0	2.0			7.0
Maint/Support			1.0	1.0				2.0
Other				1.0				1.0
TOTAL SORTIES/HOURS SCHEDULED	16.0	0.0	16.0	30.0	18.0			80.0
NON CSI SORTIES/HOURS	0.0	0.0	1.0	2.0	0.0			
CAP	8	8	8	8	7			
REPORT TIME	07:00	00:00	08:00	10:20	09:05			
FIRST MISSION START TIME	10:00	00:00	10:50	12:20	11:10			
LAST MISSION FINISH TIME	18:45	00:00	21:45	20:15	18:45			
RELEASE TIME	23:40	00:00	23:55	00:15	22:10			
REMARKS WED/THU - ENGINE RUN TNG THU - RED CARPET FRI - 7 CAP DUE TO EQUIPMENT MOD								
SIGNATURE OF OPERATIONS GROUP COMMANDER								

Attachment 3

SAMPLE AETC FORM 513

ATD DAILY UTILIZATION PLAN												TYPE OF TRAINER		DATE	
TRN NO	0600	0700	0800	0900	1000	1100	1200	1300	T-1	T-3	OTHER	TRAINER HOURS			
131	Jones	Grant	Miller	Hanner	560 FTS				6.0		1.5				
	Smith	Budlight	Trott	Barbers	E 7101	Orientation									
	C 7201	C 7101	N 7101												
133	Cox										1.5				
	Hamilton														
	FCF														
	0630	0800	0930	1100	1230										
132	Eng Run	TSSC									1.5				
134			Software Test								1.5				
REMARKS												TOTAL HOURS			
												6.0		6.0	

AETC FORM 513, MAY 94

PREVIOUS EDITIONS ARE OBSOLETE.

Attachment 4

DIRECTION FOR COMPLETING AETC FORM 776

<i>Line Heading</i>	<i>Instruction and Required Entry</i>
Type ATD	Mission design series (MDS) (example: T96).
Number Assigned	The total number of ATDs for each MDS. NOTE: For multistation trainers (A/F37A-T50, T51, T45, etc.), use the number of ATSS (cockpit, booths, etc.) for each MDS assigned.
Maximum Hours	This reflects the hours available for Air Force use according to the applicable CLS contract. Federal holidays are not included in the available hours (example, number of ATSS x number of hours/day/ATS x number of training days per month).
Total Power-On (P-O) Time	Total P-O time (T-9) for each MDS assigned. For multistation trainers, the P-O time is taken from the master P-O meter for the MDS. (Do not multiply by number or ATSS.)
General Instructions	To complete the heading titles "scheduled (weekly)," enter monthly total from complete AETC Forms 777. Complete rest of the entries from data on AETC Forms 513. Total sorties flown and total of type sorties should be equal.

Attachment 5

SAMPLE AETC FORM 776

AIRCREW TRAINING DEVICE MONTHLY SUMMARY		
UNIT/LOCATION 12 FTW, Randolph AFB TX	TYPE ATD A/F37A-T96	
MONTH/YR APR 94	NUMBER ASSIGNED 1	NUMBER OF DAYS FLOWN 20
ITEM	SORTIES	HOURS
MAXIMUM HOURS AVAILABLE		320.0
TOTAL POWER ON TIME		466.0
SCHEDULED (WEEKLY)	170	255.0
SCHEDULED (DAILY)	158	237.0
+ OPS ADDITIONS	0	
+ MAINT ADDITIONS	0	
- MAINT/CONTRACTOR LOSSES	2	
- OPS LOSSES	4	
- SUPPLY LOSSES	0	
- WEATHER LOSSES	0	
- CIVIL ENGINEERING LOSSES	0	
- OTHER	0	
TOTAL	152	
T-1	145	217.5
T-3	5	7.5
MAINT/SUPPORT	1	1.5
OTHER	1	1.5
TOTAL	152	228.0
REMARKS 2 MX LOSSES - CCA Failure 5 Apr		